

NORTH CAROLINA EMS MEDICATION FORMULARY

This formulary is maintained by the North Carolina Office of Emergency Medical Services. Intravenous fluids and medications contained on this formulary are available for use by ALS Professionals as defined by Rules of the North Carolina Medical Board [21 NCAC 32H .0102(6)] under circumstances specified by the Board [21 NCAC 32H .0400]. The local medical director may incorporate any or all of these solutions and medications into patient care protocols for use in the local ALS program. **There must be a written protocol developed for each solution and medication used from this formulary.** After the protocols are reviewed/approved by the Audit and Review Committee, they must be forwarded to the OEMS Medical Director for approval.

This formulary will be reviewed and revised, if necessary, on a biannual basis. Suggestions, additions or deletions should be forwarded to the Medical Director of the North Carolina Office of Emergency Medical Services at 2707 Mail Service Center, Raleigh, NC 27699-2707. The OEMS Medical Director will compile the recommendations into a report for the State EMS Advisory Council. The Council will discuss these recommendations in a regularly scheduled public meeting where all interested parties may present testimony regarding the recommended changes. The State EMS Advisory Council will make final recommendations to the OEMS for consideration.

The North Carolina Medical Board has approved the use of non-prescription (over the counter) medications in ALS programs provided they are included in the local ALS protocols approved by the OEMS Medical Director.

SECTION I

Fluids And Medications Approved For General Use

By EMT-Paramedics

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|------------------------------------|------------------------------------|
| 1. ACE inhibitors | 15. cyanide poisoning antidote kit |
| 2. adenosine | 16. diazepam |
| 3. adult diphtheria-tetanus toxoid | 17. diltiazem |
| 4. albuterol | 18. diphenhydramine |
| 5. aminophylline | 19. dobutamine |
| 6. amiodarone | 20. dopamine |
| 7. antibiotics | 21. droperidol |
| 8. anti-emetics | 22. epinephrine |
| 9. atropine | 23. etomidate * |
| 10. beta blockers | 24. flumazenil |
| 11. bretylium | 25. furosemide |
| 12. calcium chloride/gluconate | 26. glucagon |
| 13. clonidine | 27. glucose solutions |
| 14. crystalloid solutions | 28. haloperidol |

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| 29. heparin | 45. non-steroidal anti-inflammatory agents |
| 30. histamine 2 blockers | 46. opioid antagonists |
| 31. ipratropium | 47. paralytic agents * |
| 32. isoetharine | 48. phenobarbital |
| 33. isoproterenol | 49. phenytoin |
| 34. lidocaine | 50. pralidoxime |
| 35. lorazepam | 51. procainamide |
| 36. magnesium sulfate | 52. procaine |
| 37. mannitol | 53. proparacaine |
| 38. metaproterenol | 54. sodium bicarbonate |
| 39. methylene blue | 55. steroid preparations |
| 40. midazolam | 56. terbutaline |
| 41. narcotic analgesics | 57. thiamine |
| 42. nifedipine | 58. thrombolytics ** |
| 43. nitroglycerin | 59. vasopressin |
| 44. nitrous oxide | 60. verapamil |

**Fluids And Medications Approved For Use
By EMT-Paramedics During Interfacility Transports**

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|---|-------------------------------|
| 1. milrinone | 5. whole blood and components |
| 2. potassium chloride | 6. total parental nutrition |
| 3. platelet glycoprotein-II/IIIa inhibitors | |
| 4. thrombolytic agents | |

**Fluids And Medications Approved For Use
By EMT-Paramedics During Critical Care Transports**

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|-------------------------|----------------------------|
| 1. digoxin | 5. norepinephrine |
| 2. insulin | 6. oxytocin |
| 3. metoprolol | 7. plasma protein fraction |
| 4. nitroprusside sodium | |

* See OEMS "Implementation Guidelines for Prehospital Rapid Sequence Induction"

** See OEMS "Implementation Guidelines for Prehospital Thrombolytics"

SECTION II

Fluids And Medications Approved For General Use By EMT-Intermediates

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| 1. albuterol | 7. ipratropium |
| 2. crystalloid solutions ⁶⁷ | 8. isoetharine |
| 2. diphenhydramine | 9. metaproterenol |
| 3. epinephrine | 10. nitroglycerine (sublingual) |
| 4. glucagon | 11. opioid antagonists |
| 5. glucose solutions | 12. terbutaline |
| 6. heparin | 13. thiamine |

Fluids And Medications Approved For Use By EMT-Intermediates During Interfacility Transports

None Available

SECTION III

Fluids And Medications Approved For Use By EMT-Defibrillation For Patients With Systemic Allergic Reaction

1. epinephrine

Fluids And Medications Approved For Use By EMT-Defibrillation Requiring On-Line Medical Control For Patients With A Current Prescription For These Medications

1. albuterol
2. nitroglycerin

Fluids And Medications Approved For Use By EMT-Defibrillation During Interfacility Transports

None Available

Implementation Guidelines for Prehospital Rapid Sequence Induction

Effective August 10, 1999: To implement Prehospital Rapid Sequence Induction (RSI) within an EMS system, the following items must be in place:

1. A written protocol or decision tree, which indicates when, and how RSI is to be used with respect to the other available airway modalities. An example is: When is RSI to be used rather than nasal intubation or Cricothyrotomy?
2. A written protocol, which addresses how, when, and to whom RSI is to be performed. This includes defining whether standing order or online physician order is required.
3. A formal, written procedure describing the actual technique from a teaching perspective. This includes a step-by-step approach to the procedure and describes any limitations to the use of the procedure, such as age, preexisting medical conditions, etc.
4. The use of end-tidal (colorimetric) CO₂ detection and pulse Oximetry is required and must be documented in the protocols and procedures.
5. The ability to perform a surgical Cricothyrotomy is required.
6. The system medical director must complete the mandated North Carolina Office of EMS Medical Director's Course.
7. The Critical Care Curriculum on RSI must be taught to all paramedics given the privilege to use RSI.

The RSI clinical education requirements for the individual EMT-P are:

1. Successful completion of the RSI curriculum.
2. One-year experience as an EMT-P in the EMT-P program initiating the RSI program. The medical director may credit previous experience as an EMT-P in another North Carolina EMT-P program or an EMT-P program in another state. To execute this option, the medical director must have verification of previous experience from the medical director/training officer of the EMT-P program(s) where the experience was completed.

3. A minimum of six successful intubations with a minimum of three intubations out of the hospital.

Once these items have been completed and submitted for approval by the Office of EMS, RSI may be used within the EMS system.

Implementation Guidelines for Prehospital Thrombolytics

Effective May 9, 2000: To implement Prehospital Thrombolytic therapy for cardiac indications within an EMS system, the following items must be in place:

1. Written letter of support from the local EMS system medical director
2. Written letter of support from the Chief of Staff of each hospital in the EMS service area which will be accepting patients.
3. A written policy or decision tree, which indicates when thrombolytics are to be used within the EMS system.
4. A written protocol and procedure, which addresses how thrombolytics are to be administered. This includes defining whether standing order or online physician order is required. This includes a step-by-step approach and describes any limitations to the use of thrombolytics, such as age, preexisting medical conditions, etc.
5. The use of 12 lead ECG and a description of how this will be obtained, transmitted and interpreted by prehospital and medical control.
6. The addition of the "Rectal Exam" and hemocult testing as a procedure. This includes a written policy and procedure describing the method, indications, and contraindications.
7. A formal thrombolytics screening form that will provide a standardized screening of contraindications prior to thrombolytics administration.
8. The system medical director must complete the mandated North Carolina Office of EMS Medical Director's Course.
9. A written quality management plan addressing how the local EMS system will monitor the use of thrombolytics.
10. A written statement describing how the thrombolytics will be stocked in ambulances (stocked in all EMS units, only units stationed greater than X minutes from a hospital, etc.)

Once these items have been completed and approved by the Office of EMS, Thrombolytics may be used within the EMS system.